The Research on Cultivation and Evaluation of College Students' Autonomous Learning Ability

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Abstract. In context of creating the first-class undergraduate education in China, this paper focuses on the teaching reform project which actually is mainly based on two digital platforms of the training of students' autonomous English learning ability. Teachers combine many digital teaching methods to guide, assist, supervise, and evaluate in and out of the classes to stimulate students' learning interest and initiative, so that students could have greater autonomy in learning, and shorten the distance between classroom teaching and autonomous learning. In this way, students can determine clear English learning goals, learn to make simple English learning plans, reflect on their own advantages and disadvantages in the learning process, and correctly evaluate their own learning, so that the development of college students' personality can be fully guaranteed. This paper is hoped to provide some references to the digital reform of English teaching in the systematic construction of first-class practical personnel training.

1. Introduction

As educators, we know more clearly that in today's era of knowledge explosion, any education can not impart all human knowledge to learners, the task of education must be changed from making students learn knowledge to cultivating students' learning ability, which is the essence of learning. Also, the level of undergraduate education and teaching is always the core symbol to measure whether a university is qualified to cultivate talents. As a result, reflecting on the realistic demand of first-class undergraduate education in the new era that calls for the return of academic spirit, the project team proposes a teaching reform project with the goal of "cultivating students' autonomous learning ability, stimulating students' interest in Learning English, and mobilizing students' learning initiative".

With the combination of modern educational technology and advanced teaching concepts, innovative English teaching models in the network environment, such as online learning, distance education, micro-classes, flipped classes and MOOCs, can break through the limitations of time, space, teachers and teaching resources in students' autonomous learning through the network environment. Students can meet diversified and personalized independent learning needs anytime and anywhere. However, there are some differences in English learning resources in the network environment. With the convenience of the network environment, everyone can become the provider and disseminator of network resources and promote the sharing of learning resources. As a result, there are a lot of information resources on the Internet, and the quality of English learning resources is very different, and some of them have obvious mistakes. Students lack the ability to distinguish the quality of these resources, and the learning effect is greatly reduced. In addition, college students have great characteristics in learning habits, ability, attitude, awareness, environment, purpose and other aspects, so the study of college students' learning autonomy should be carried out according to the reality of students, otherwise it is difficult to have good results.

Then the common teaching evaluation method of English teaching is terminal evaluation, that is, the evaluation of students' English learning in one stage is generally reflected by a paper. However, the traditional final evaluation is difficult to truly reflect the students' independent learning situation,

and cannot play the role of summary and feedback of the learning situation that the evaluation should have. Therefore, it should be put on the agenda to change the evaluation method to stimulate students' learning interest and mobilize students' learning enthusiasm. This needs to test the wisdom of teachers, how to strengthen students' independent learning through classroom teaching and assessment of their performance.

The project team found that the distinguishing feature of formative assessment from terminal assessment is that it pays attention to "feedback" and "process", and there is a close relationship between college English autonomous learning and formative assessment. On one hand, formative evaluation itself is a learning process, and from a cognitive point of view, it is also a communicative process. Students can realize the process of reasoning and summary through different ways and means, improve the level of self-thinking, further deepen the understanding of English learning, and improve their own language application level. On the other hand, formative assessment is enhanced by the characteristics of English learning itself. English learning is not a one-way input process, but an interactive process of input and output. Therefore, the evaluation of English learning must be an interaction between subjects. Evaluation is not only the one-way implementation of teachers to students, but also the integration of evaluation and learning through the positive interaction between the evaluated and evaluators. At this level, formative evaluation activities make the evaluation behavior no longer a one-way and fragmented process, and the effect evaluation of college English autonomous learning also shows a brand-new feature.

2. The Research Progress is as Follows

Since the project was established in May 2020, with the strong support of the school, the project team has carefully sorted out the theory and preliminary research, made a plan, and then carried out two rounds of experiments.

2.1 Firstly, the Investigation on Students' Autonomous Learning was Completed.

Referring to the "Learning autonomy scale test brochure" compiled by Professor Pang Weiguo of East China Normal University, and according to the actual situation of students in our school, the project team selected some items in the whole brochure and distributed them to students. It is found that students seldom learn English by themselves, and generally learn English for the purpose of examination under the arrangement of teachers. Although they often watch English movies and listen to English music, which is mainly for entertainment. Some of them sometimes recite words through APPs on internet, but usually they cannot stick to it for a long time.

2.2 Secondly, A Complete Training Program for Students' Autonomous Learning has Been Developed on U-Campus and We-Learn Platforms, as Well as the Principles of Formative Evaluation for Students.

U-campus platform is supporting the reading and writing courses, on which teachers set the following parts with different proportions for the formative evaluation like Table 1:

Table 1. Different Proportions for the Formative Evaluation

U-campus evaluation	learning duration	Interactive check-in	Online practices
Final score includes:	20% (300minutes)	20% (8 times)	60% (8 reading and writing exercises)

The settings on the We-Learn platform which supports listening and speaking courses are as Figure1 shows: We-learn Final score=Duration: 300 minutes: 10%+ 8 login times: 5%+ 2 check-in times: 5%+ 2 announcement reading times: 5%+ 4 class materials study times: 10%+course exercises: Extended Listening35% + self-test: 30%.
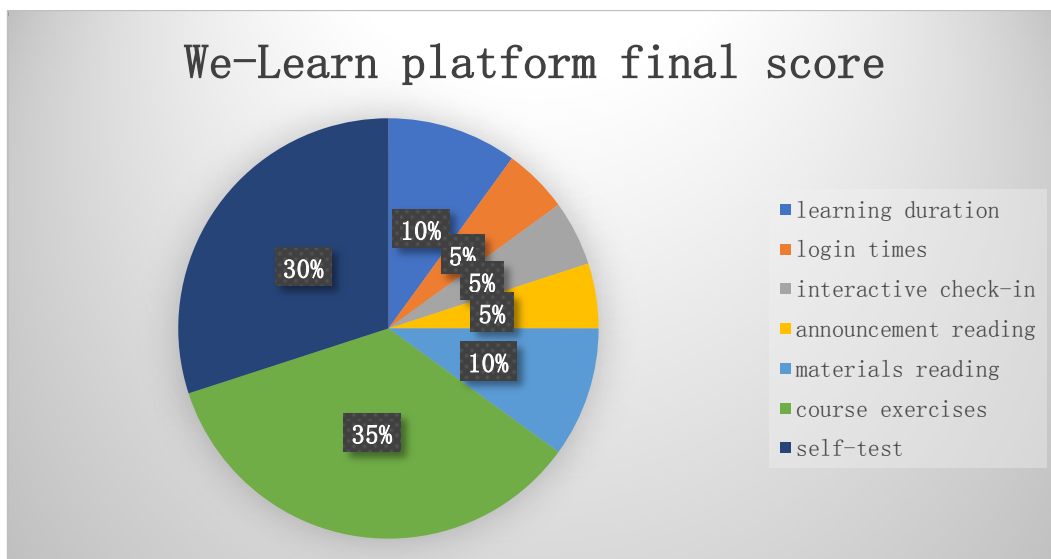
Figure 1. The Settings on the We-Learn platform

Make use of the digital platform to arrange students to consult relevant information before class, collect information, and assign after-class homework and so on. Teachers establish "student-learning files" on the platform, including students' classroom attendance, performance in classroom, efforts to complete the task, reflection of some problems in the learning and the correspondent solutions, homework records (number, content, quality and level, etc.), records of the extracurricular activities (. number, quality, self-evaluation, teachers' and students' mutual assessment, awards, etc.). Also, in the files, students can list their learning objectives, learning plans, learning strategies, etc. What's more, students can check the contents of e-learning files step by step, compare the learning effect, adjust the learning plan, learning objectives and learning strategies, and make objective self-evaluation based on it. The students in the same study group can evaluate each other according to their performance in collaborative learning; Students make self-evaluation according to their own learning objectives, learning strategies and learning effects. The whole set of files are kept by the students and the teachers respectively. The teachers check the files kept by the students irregularly and give feedback to the students' situation. According to the completion and score of students' homework, students are provided with the information of knowledge mastery and homework completion. Meanwhile, students' online learning duration, accuracy rate and homework completion are recorded.

2.3 Thirdly, the Experiment was Carried out for Two Semesters. Classes of Different Departments of Grade 2020 Were Selected as the Experimental Units.

According to the established training program to achieve the target practice approach of students' autonomous learning ability, the task was implemented in layers with interest activities as the carrier, and the score analysis of the first and the second semester from 2020 to 2021 was completed.

In addition, the evaluation proportion of the two round of the experiment was divided as Table 2 shows:

Table 2. The Evaluation proportion of Final Mark

Overall evaluation	Classroom	Two monthly exams	Two platforms	Final exam
Final score	20%	15%	30%	35%

2.4 At Last, after the Exam, the Team Members Analyzed The Results and Made a Comparative Study by Analyzing Score Data Between Different Classes of the Two Semesters of 2020-2021.

On the basis of the first round of research, research team prepared teaching plans for the current ideological and political class version of New Horizons College English Course - Reading and

Writing Course in the second semester of 2020-2021, including task design of each unit. Specifically, it is divided into pre-task, while-task and post-task, supplemented by pre-task and post-task, and arranges students to consult and understand information in advance, collect data, and assign online expansion homework, etc. Specific tasks have been taken as the teaching objective and practice approach, and interest activities have been taken as the carrier to carry out hierarchical implementation of tasks. The experiment continued in December 2021. Classes of the same grade and different departments have been taken as the experimental unit. In December 2021, after the completion of the implementation process, the results of the experimental class and the control classes' data analysis were conducted to verify the effectiveness of the research. By comparing the academic performance of the experimental classes and the control class, the experimental classes' scores are significantly improved. The details are listed in Table 3 below:

Table 3. Comparison of pre-test and post-test score data between different classes in two semesters of 2020-2021

Class classification	Pretest Average Score	Posttest Average Score	Pretest Standard deviation	Posttest standard deviation	pre-test pass rate	Posttest pass rate
Control class(1st term)	69.56	70.72	9.96	8.93	83.71%	85.97%
Experimental class 1(1st term)	67.2	75.91	9.10	7.11	78.1%	96.45%
Experimental class 2(1st term)	68.8	75.42	7.33	7.93	73.3%	95.8%
Control class(2ndterm)	71.36	72.72	8.56	8.12	78.9%	85.26%
Experimental class1(2nd term)	69.33	75.61	8.10	7.55	78.17%	91.32%
Experimental class2(2nd term)	70.13	74.5	7.33	6.62	79.24%	92.61%

In the first semester, as can be seen from the above table, the average score of the students in the control class increased from 69.56 to 70.72, and the score of the students in the experimental classes also improved, but the degree of increase was significantly lower than that of the experimental classes. The standard deviation of the control class decreased from 9.96 to 8.93, but the difference of students' scores was still higher than that of the experimental classes.

The English learning scores of the experimental class were significantly improved compared with the pre-test scores. The average level of experimental class 1 increased from 67.2 to 75.91(1st term), up nearly 8 points, and the standard deviation decreased. The average level of experimental class 2 increased from 68.8 to 75.42(1st term), up about 7 points, and the standard deviation also decreased more(nearly 2 points) than the control class, indicating that the experimental class students not only made great progress in their scores, but also reduced the differences among students.

In addition, the pass rates of experimental class 1 and 2 both exceeded over 95% in the posttest which is increased more than 15 points, indicating that most students met the standard requirements. Comparing the academic performance of the experimental classes and the control class, the experimental class academic performance improves quickly.

The same thing happened in the second term. As can be seen from the last three lines of the form, the English learning scores of the experimental classes were significantly improved compared with the pre-test scores. The average score of the students in the control class increased from 71.36 to 72.72(2nd term). The score of the students in the control class improved, but the increase degree was significantly lower than that of the experimental class. The standard deviation of the control class decreased from 8.56 to 8.12(2nd term), only decreasing by 0.44(2nd term), but the difference of students' scores was still higher than that of the experimental classes.

The average level of experimental class 1 increased from 69.33 to 75.61(2nd term), up nearly 6 points, and the standard deviation decreased. The average level of experimental class 2 increased from 70.13 to 74.5(2nd term), up 4 points, and the standard deviation also decreased, indicating that

the experimental class students not only made great progress in their scores, but also reduced the differences among students. In addition, the pass rate of experimental class 1 and 2 was over 90% which is much better than the control class, and indicate that most students met the standard requirements.

3. Major Problems to be Solved

3.1 More resolutions should be found to help students to clarify the plans and goals of autonomous English learning.

3.2 Continue to do everything possible to help improve students' lack of media literacy, that is, use the Internet environment to screen high-quality English teaching resources and improve the quality and efficiency of autonomous learning.

3.3 Strengthen the cultivation of students' autonomous learning ability.

3.4 Improve the formative evaluation mechanism of students' autonomous English learning.

4. Conclusion

Autonomous learning and Formative evaluation are the needs of the times, but if the online learning platform is not regulated, students react negatively, and teachers become mere formality, it will waste good resources. This project focuses on the independent learning and evaluation of public English for non-English majors in colleges and universities. Through theoretical deduction and case analysis, this project attempts to clarify the evaluation factors that affect the effect of college students' independent English learning, and explore a more feasible, comprehensive and scientific formative evaluation system. Therefore, for college students, English learning should not stay on the management and measurement of CET-6 validity, but should form a constructive lifelong learning system through the active promotion of formative evaluation system. And the results show the methods work efficiently.

Research is converging on the conclusion that autonomous study is a kind of urging to arrange the content of English learning. It promotes students' classroom activities to effectively achieve the set learning objectives and improve students' ability and initiative in applying English. Sometimes, students need to cooperate with classmates to solve all kinds of problems and puzzles encountered in learning together., so as to avoid individual slackness in learning. Students become the protagonists of classroom activities instead of passive recipients, so that they can learn to monitor their autonomous English learning and gradually complete it according to the established learning goals and plans.

Acknowledgements

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